

GLOSSARY

- Controller panel** The electronic device that contains the input data port for the LR-3000 reader. For the Wiegand interface, this may be the access control system's panel or board near the reader or gate operator, or the reader input module (RIM). For the RS-232 interface, this may be the system controller or a PC's serial input port.
- Credential** A token, such as a card or tag or wafer, that carries data to identify the individual token, and therefore to identify the person or vehicle by which the token is carried.
- Effective RF field** The three-dimensional space in front of the LR-3000 reader in which the vehicle tag can be read by the reader. The field is circularly polarized. It has a circular cross-section at every distance from the reader. (See the diagram of the "Effective RF Field".)
- Isolation** A trouble-shooting technique that separates the components of the system temporarily so that performance of the components can be observed and measured individually.
- Lane** The roadway that leads the vehicle past the reader and toward the gate. The ideal lane is a single vehicle width, or is marked by signs, painted stripes, cones, posts, bollards or barriers that remind the drivers to stay close to the reader.
- Power supply, switching** A DC power supply whose DC output is generated by a circuit that produces interrupted current flow, at a rate of around 25 kilohertz. (A **linear** power supply has continuous DC output, like a battery.)
- Read range** The space along the axis of the reader's effective RF field in which the tag can be read in hand-held testing. This extends from the LR-3000 reader's face to the maximum distance – typically between 10 feet and 15 feet, depending upon the tag. (See the diagram of the "Effective RF field".)
- Substitution** A trouble-shooting technique that replaces a component of uncertain performance with a similar component that you know works well.
- Sweet spot** The space in front of the LR-3000 reader where most credentials in a given installation are read. This is typically about 10 feet to 15 feet direct measurement from the face of the reader. At the sweet spot, the reader's effective RF field has a cross-section with a diameter of about 4 feet or more.
- Tag orientation** Direction ("landscape" or "portrait") that tags are mounted in or on vehicles. If the reader looks down on a tag, landscape may give best reading. If the reader is at the side of the vehicle, portrait may be best.